REMARKS

Currently, claims 23-29 and 34-59, including independent claims 23, 36, and 45, are pending in the present application. Independent claim 23, for instance, is directed to a method for drying a paper web. The method comprises distributing a supply air stream to a first dryer section and a second dryer section of a through-dryer. A relatively wet paper web is contacted with the supply air stream within the first dryer section at an elevated temperature to form a relatively dry paper web. Further, the relatively dry paper web is contacted with the supply air stream within the second dryer section at a reduced temperature in comparison to the elevated temperature. The method also comprises (i) combining a first stream of air with the supply air stream to provide the elevated temperature within the first dryer section and/or (ii) combining a second stream of air with the supply air stream to provide the reduced temperature within the second dryer section.

As indicated above, independent claim 23 has been amended to require a "through-dryer" having first and second dryer sections.[1] In the Office Action, dependent claim 33, which previously included the limitation of a "through-dryer", was rejected under 35 U.S.C. §103(a) as being obvious over WO 99/57367 to Heikkila, et al. in view of U.S. Patent No. 4,462,868 to Oubridge, et al. Similarly, independent claims 36 and 45 were also rejected under §103(a) over the same references. However, Applicants respectfully submit that independent claims 23, 36, and 45 patentably define over the cited references, taken singularly or in any proper combination.

[1] For purposes of clarity only, various other minor amendments were also made to independent claims 23, 36, and 45.

Heikkila, et al., for example, is directed to a Yankee drying cylinder covered by at least one air hood that is smaller than the Yankee hood.[2] Hot air jets are blown from the Yankee hood sections towards the web passing over the Yankee cylinder, whereby the hot air jets generally have a temperature that is at most about 550°C. Hotter air jets, i.e., with a temperature greater than 550°C, are blown from the hot air hood. The hot air hood may be a completely separate hood or combined with and/or supported on either hood section of the Yankee hood. The exhaust air from the region of the hot air hood (the air discharged from the space defined by the hot air hood and Yankee hood) may be directed to the wet end section of the Yankee hood for mixing with the recirculating air of the wet end section. When the exhaust air of the hot air hood is directed into the Yankee hood, it is possible to continuously supply the hot air hood with air that has been heated to a suitable temperature (e.g., 500-700°C).

As correctly noted by the Examiner, however, Heikkila, et al. fails to disclose a "through-dryer" that utilizes first and second dryer sections as set forth in independent claims 23, 36, and 45. Nevertheless, the Office Action stated that it would have been obvious to combine the teachings of Heikkila, et al. with Oubridge, et al. "because such a combination would provide for faster drying in the design of Heikkila as disclosed by Oubridge." Initially, Applicants respectfully point out that the Office Action provides no evidence whatsoever that the combined teachings of Heikkila, et al. and Oubridge, et al. would actually provide "faster drying." In fact, it is Applicants understanding that through-drying techniques are often slower than Yankee drying techniques.

[2] Applicants in no way acquiesce to the status of Heikkila, et al. as prior art to the present application, and expressly reserve the right to challenge such status at a later date.

In any event, one of ordinary skill in the art would still not have been motivated to combine the teachings of the cited references. In particular, the entire invention of Heikkila, et al. relates to "Yankee" dryers, while the entire invention of Oubridge, et al. relates to "through-dryers." These two types of dryers are completely different. A "Yankee dryer" is a large diameter drum that is internally heated to provide a hot surface for completely drying a paper web adhered thereto. A major portion of the drum may be encompassed by a hood that continuously provides hot air for further drying the sheet and exhausting moisture. Drying is accomplished by the combination of the heated Yankee dryer surface and the hot air circulating through the hood.[3] On the other hand, a "through-dryer" employs a hollow rotating drum and a hood that work together to blow heated air through the paper web. Further, contrary to a Yankee dryer, a web dried with a through-dryer is *not* generally adhered to nor impressed against the drum. Moreover, through-dryers typically employ much lower air temperatures than Yankee dryers. Heikkila, et al., for instance, refers to five examples that each employ a Yankee hood having an air temperature of 500°C and a hot air hood having an air temperature of 700°C. (p. 5, ll. 15-35 and p. 6, ll. 1-6). In contrast, the through-dryer example described in Oubridge, et al. employs air temperatures of at most about 371.1°C. (Col. 4, ll. 51-66).

Thus, for at least the reasons set forth above, one of ordinary skill in the art would certainly not have been motivated to combine aspects of a reference specifically tailored to through-dryers (i.e., Oubridge, et al.) with another reference specifically tailored to Yankee dryers (i.e., Heikkila, et al.). In fact, the combination of through-dryer

[3] See e.g., Col. 1, ll. 7-21 of U.S. Patent No. 4,615,122 to Sherrod, et al., which is cited in an Information Disclosure Statement submitted herewith.

design features with the Yankee dryer of Heikkila, et al. would seemingly result in a fundamental change in the principle of operation of Heikkila, et al., and thus, not be sufficient to render the claims *prima facie* obvious. MPEP §2143.01. Further, it is not certain how certain aspects of Oubridge, et al. could even be combined with Heikkila, et al.

In addition, Applicants note that, even if the cited references could somehow be combined, the resulting combination would still fail to disclose or suggest various aspects of the present claims. For instance, Heikkila, et al. does not disclose an elevated temperature of from about 400°F to about 500°F as set forth in independent claim 36, but instead discloses elevated temperatures of greater than 550°C (i.e., 932°F). Accordingly, for at least the reasons set forth above, Applicants respectfully submit that independent claims 23, 36, and 45 patentably define over the above-cited references, taken singularly or in any proper combination.

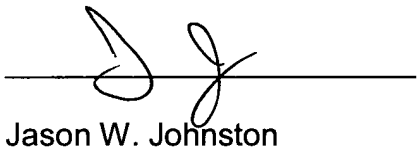
In addition, Applicants respectfully submit that dependent claims 24-29, 34-35, 37-44, and 46-59 patentably define over the cited references for at least for the reasons set forth above relating to independent claims 23, 36, and 45. However, Applicants also note that the patentability of such dependent claims does not necessarily hinge on the patentability of independent claims 23, 36, and 45. In particular, it is believed that some or all of these dependent claims may possess features that are independently patentable, regardless of the patentability of claims 23, 36, and 45. For example, as noted above, Heikkila, et al. does not disclose an elevated temperature of from about 400°F to about 500°F, such as set forth in dependent claims 52 and 56.

It is believed that the present application is in complete condition for allowance and favorable action, therefore, is respectfully requested. Examiner Halpern is invited and encouraged to telephone the undersigned, however, should any issues remain after consideration of this response.

Please charge any additional fees required by this Amendment to Deposit Account No. 04-1403.

Respectfully requested,

DORITY & MANNING, P.A.



Jason W. Johnston
Registration No. 45,675

DORITY & MANNING, P.A.
P. O. Box 1449
Greenville, SC 29602-1449
Phone: (864) 271-1592
Facsimile: (864) 233-7342

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